

Tuesday, July 12, 2016 8:52:55 AM

Item ID: D350-567-141

Accept

N900040100

Setup Start *NS1*

Revision ID:

Item Name: Floor Window Close Out

Stop *NS2*

Start Date: 6/30/2016 **Start Qty:** 1.00 ***1***

Cust Item ID:

Required Date: 7/13/2016 **Req'd Qty:** 1.00 ***1***

Customer:

Reference:

Approvals: Process Plan: 21 Date: JUL 13 2016 Tooling: _____ Date: _____
 QC: 9-89 Date: _____ SPC (Y/N): _____ Date: _____

Run Start *NR1*

Stop *NR2*

[illegible]

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment ☐	☐	No Re-verification ☐	☐	Pressure/Forced ☐	☐	Temperature/Cure ☐	☐
Design ☐	☐	Operator ☐	☐	Bending ☐	☐	Set-up ☐	☐
Doc/Data ☐	☐	Offset/Setup ☐	☐	Centre Not Concentric ☐	☐	BOM/Route ☐	☐
Equip/Tooling ☐	☐	Supplier ☐	☐	Cracks ☐	☐	Broken/Damage/Defect ☐	☐
Handling/Pre ☐	☐	Training ☐	☐	Crimp/Kink/Ripple/Wave ☐	☐	Inspection Incomplete/Unqualified ☐	☐
Material ☐	☐	Use for Testing ☐	☐	Cuffs ☐	☐	Contamination ☐	☐
Internal Transport ☐	☐	Poor Information ☐	☐	Crushing ☐	☐	Countersink ☐	☐
Tribal Knowledge ☐	☐	Rushing ☐	☐	Heat Treat ☐	☐	Cut Too Short ☐	☐
LOA ☐	☐	Product Improvement ☐	☐	Wave/Twist in Tube ☐	☐	Instructions Incomplete/Unclear ☐	☐
Substation ☐	☐	Process Improvement ☐	☐	Marks/Chatter ☐	☐	Drill Holes ☐	☐
Past Expiry Date ☐	☐	Manufacturing Process ☐	☐	OTHER : _____			
Misidentified ☐	☐	Past Due ☐	☐				

Work Order ID 148887

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148887

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Item ID: D350-567-141**Accept*****N900040100*****Setup Start*****NS1*****Revision ID:****Stop*****NS2*****Item Name:** Floor Window Close Out**Start Date:** 6/30/2016 **Start Qty:** 1.00***1*****Cust Item ID:****Required Date:** 7/13/2016 **Req'd Qty:** 1.00***1*****Customer:****Reference:****Approvals:** **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____**Run Start*****NR1*****QC:** _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____**Stop*****NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Packaging	0.00				DAS 28 9-89	DAS 27 9-89	DEC 08 2016	
130	Packaging	0.00							
Packaging	Memo Identify and pack for shipping as per PPP D350-567-141 Location:FG033								
140	QC21- Final Inspection - Work Order Release	0.00				DAS 21 9-89		DEC 08 2016	
140	QC	0.02							
Quality Control	Memo								
						DAS 21 9-89		DEC 08 2016	

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval 	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

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148887

D350-567-141

Required Date: 7/13/2016

Required Qty: 1.00

Comments: IPP REV:A 11.11.09 new issue DD verf:JLM IPP REV:B
12.01.23 AS PER ECN12-511 DD VERF:EC IPP REV:C 12.03.05
AS PER ECN12-537 DD VERF:EC IPP REV:D 13.04.01 AS PER
DSI9590 REV.E DD VERF:JLM IPP REV :E AS PER DSI9590 REV F JLM
VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4434-047		Manufactured	No				Each	0.0000		1			
D4434-047 Cover Assembly D3802-1 <i>M.D.</i>													
D3802-1		Manufactured	No			110	f	103.5918	2	2			
D3802-1 Windows Seal (\$ Per Foot)													
				<u>Location</u>			<u>Loc Qty</u>		<u>Loc Code</u>				
				ST416			103.591836						
				146267			3.591836						
				147067			50						
				147802			50						
D4434-041		Manufactured	No			110	Each	1.0000	1	1			
D4434-041 Fwd Bracket Assembly													
				<u>Location</u>			<u>Loc Qty</u>		<u>Loc Code</u>				
				ST623			1						
				143465			1						
D4435-045		Manufactured	No			110	Each	0.0000	1	1			
D4435-045 T/R Bellcrank Cover Assembly													

DAS
28
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment ☐	☐	No Re-verification ☐	☐	Pressure/Forced ☐	☐	Temperature/Cure ☐	☐
Design ☐	☐	Operator ☐	☐	Bending ☐	☐	Set-up ☐	☐
Doc/Data ☐	☐	Offset/Setup ☐	☐	Centre Not Concentric ☐	☐	BOM/Route ☐	☐
Equip/Tooling ☐	☐	Supplier ☐	☐	Cracks ☐	☐	Broken/Damage/Defect ☐	☐
Handling/Pre ☐	☐	Training ☐	☐	Crimp/Kink/Ripple/Wave ☐	☐	Inspection Incomplete/Unqualified ☐	☐
Material ☐	☐	Use for Testing ☐	☐	Cuffs ☐	☐	Contamination ☐	☐
Internal Transport ☐	☐	Poor Information ☐	☐	Crushing ☐	☐	Countersink ☐	☐
Tribal Knowledge ☐	☐	Rushing ☐	☐	Heat Treat ☐	☐	Cut Too Short ☐	☐
LOA ☐	☐	Product Improvement ☐	☐	Wave/Twist in Tube ☐	☐	Instructions Incomplete/Unclear ☐	☐
Substation ☐	☐	Process Improvement ☐	☐	Marks/Chatter ☐	☐	Drill Holes ☐	☐
Past Expiry Date ☐	☐	Manufacturing Process ☐	☐	OTHER : _____			
Misidentified ☐	☐	Past Due ☐	☐				

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Work Order ID: 148887

148887

Parent Item: D350-567-141

D350-567-141

Parent Item Name: Floor Window Close Out

Start Date: 6/30/2016

Required Date: 7/13/2016

Start Qty: 1.00

Required Qty: 1.00

D4435-9	Manufactured	No	110	Each	25.0000	2	2	DAS 27 9-89	NOV 23 2016	DAS 27 9-89
D4435-9										
Bracket										
			<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>					
			ST098	25						
			145909	25						
D4436-041	Manufactured	No	110	Each	0.0000	1	1	DAS 27 9-89	NOV 23 2016	DAS 27 9-89
D4436-041										
Aft Bracket Assembly										
D4441-1	Manufactured	No	110	f	391.5960	2	2	DAS 27 9-89	NOV 23 2016	DAS 27 9-89
D4441-1										
Rubber Seal										
			<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>					
			ST422	391.596						
			120932	391.596						
AN3-3A	Purchased	No	110	Each	154.0000	7	7	DAS 27 9-89	NOV 23 2016	DAS 27 9-89
AN3-3A										
Bolt										
			<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>					
			ST350	154						
			m134738	25						
			m134848	16						
			m134962	13						
			m135046	100						
AN525-10R6	Purchased	No	110	Each	334.0000	2	2	DAS 27 9-89	NOV 23 2016	DAS 27 9-89
AN525-10R6										
Screw										
			<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>					
			ST329	334						
			M134502	334						

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
				Completed By					
				Lead hand / Supervisor Approval Verification					
				QC / QA Coordinator Approval					
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

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Work Order ID: 148887

148887

Parent Item: D350-567-141

D350-567-141

Parent Item Name: Floor Window Close Out

Start Date: 6/30/2016

Required Date: 7/13/2016

Start Qty: 1.00

Required Qty: 1.00

AN525-832R7

Purchased

No

110

Each

116.0000

2

2

AN525-832R7

Screw

**

NOV 23 2016

DAS
6
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

GA

47

m134070

47

ST328

69

m134070

69

MS21042L06

Purchased

No

110

Each

150.0000

7

7

MS21042L06

Nut

**

13740

NOV 23 2016

DAS
6
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

ST303

150

m134962

50

m135046

100

MS21042L08

Purchased

No

110

Each

1,076.000

2

2

MS21042L08

Nut

**

135948

NOV 23 2016

DAS
6
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

GA

172

m133134

3

m134063

169

ST303

887

m133922

37

m134574

4

m134654

196

m134962

200

m135046

350

m135133

100

ST308

17

m134376

17

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

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Work Order ID: 148887

148887

Parent Item: D350-567-141

D350-567-141

Parent Item Name: Floor Window Close Out

Start Date: 6/30/2016

Required Date: 7/13/2016

Start Qty: 1.00

Required Qty: 1.00

MS21042L3

Purchased

No

110

Each

2,638.000

5

5

MS21042L3

Nut

**

135767

NOV 23 2016

DAS
6
9-89

DAS
27
9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK007

600

m135056

600

FP001

14

m133790

14

GA

127

m134360

127

OVER007

1200

m135135

1200

ST303

697

m134039

12

m134943

685

MS21059L3

Purchased

No

110

Each

173.0000

2

2

MS21059L3

Nut Plate

**

135774

NOV 23 2016

DAS
6
9-89

DAS
27
9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

CA

8

M129682

8

GA

59

M135058

59

ST301

86

M135015

86

ST303

20

M133016

20

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	

Root Cause				FAULT CATEGORY			
Environment ☐	☐	No Re-verification ☐	☐	Pressure/Forced ☐	☐	Temperature/Cure ☐	☐
Design ☐	☐	Operator ☐	☐	Bending ☐	☐	Set-up ☐	☐
Doc/Data ☐	☐	Offset/Setup ☐	☐	Centre Not Concentric ☐	☐	BOM/Route ☐	☐
Equip/Tooling ☐	☐	Supplier ☐	☐	Cracks ☐	☐	Broken/Damage/Defect ☐	☐
Handling/Pre ☐	☐	Training ☐	☐	Crimp/Kink/Ripple/Wave ☐	☐	Inspection Incomplete/Unqualified ☐	☐
Material ☐	☐	Use for Testing ☐	☐	Cuffs ☐	☐	Contamination ☐	☐
Internal Transport ☐	☐	Poor Information ☐	☐	Crushing ☐	☐	Countersink ☐	☐
Tribal Knowledge ☐	☐	Rushing ☐	☐	Heat Treat ☐	☐	Cut Too Short ☐	☐
LOA ☐	☐	Product Improvement ☐	☐	Wave/Twist in Tube ☐	☐	Instructions Incomplete/Unclear ☐	☐
Substation ☐	☐	Process Improvement ☐	☐	Marks/Chatter ☐	☐	Drill Holes ☐	☐
Past Expiry Date ☐	☐	Manufacturing Process ☐	☐	OTHER : _____			
Misidentified ☐	☐	Past Due ☐	☐				

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Work Order ID: 148887

148887

Parent Item: D350-567-141

D350-567-141

Parent Item Name: Floor Window Close Out

Start Date: 6/30/2016

Required Date: 7/13/2016

Start Qty: 1.00

Required Qty: 1.00

MS35206-229

Purchased

No

110

Each

88.0000

7

7

MS35206-229

Screw

**

NOV 23 2016 DAS 27 6 9-89

Location

Loc Qty

Loc Code

ST271

88

M134070

88

NAS1149F0332P

Purchased

No

110

Each

2,682.000

12

12

NAS1149F0332P

Washer

**

NOV 23 2016 DAS 27 6 9-89

Location

Loc Qty

Loc Code

GA

282

m133709

282

ST262

2400

m134257

37

m134676

363

m135058

2000

NAS1149FN616P

Purchased

No

110

Each

18.0000

14

14

NAS1149FN616P

WASHER

**

NOV 23 2016 DAS 27 6 9-89

Location

Loc Qty

Loc Code

ST263

5

M133988

5

ST264

13

M134738

13

NAS1149FN816P

Purchased

No

110

Each

748.0000

2

2

NAS1149FN816P

WASHER

**

NOV 23 2016 DAS 27 6 9-89

Location

Loc Qty

Loc Code

ST263

748

117316

748

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS D350-567 REV. E OR EARLIER
AND INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D350-567 REV. 2 OR EARLIER

REF CANADIAN STC: SH92-18

FAA STC: SH989NE

FAA STC: SH990NE

1.0 Purpose

The purpose of this service instruction is to add the D350-567-141/-143/-145 Close-out Kits, which are intended for customers wishing to operate their aircraft with the interior floor window removed. The D350-567-141/-143/-145 Floor Window Close-out Kits provide a barrier around the interior and exterior vertical reference floor window to prevent objects from falling into the aircraft controls when the interior floor window is removed as shown in Figure 1. The -143 Kit is identical to the -141 Kit with the exception of the D4971-041 T/R Bellcrank Cover Assy which replaces the D4435-045 T/R Bellcrank Cover Assy on aircraft fitted with energy attenuating seats. The -145 Kit is similar to the -143 Kit but is only kit compatible with the AS350 B3e aircraft.

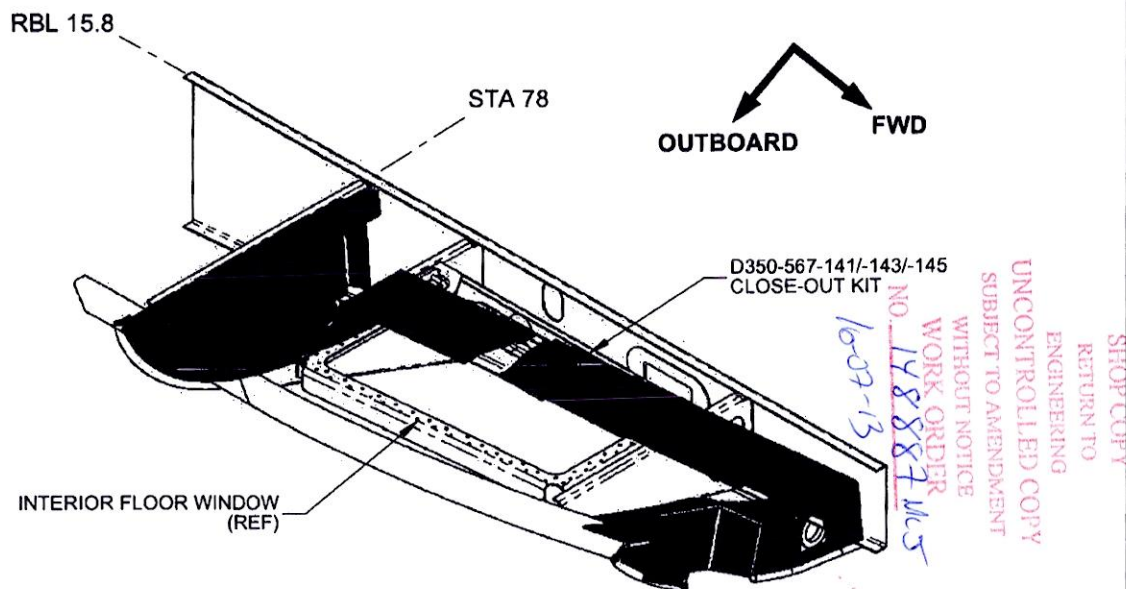


Figure 1. Floor Window Close-out Kit Installation

F	ADDED D4434-047 TO -141 KIT SEE PAR14-372.	AJS	15.01.12
E	ADD -143/-145 KITS	RF	14.03.20
E	CLARIFY FIGURES 3-12	VS	13.09.11
C	CORRECT TYPO NAS1149FN816P WAS NAS1149FN882P	RF	12.03.13
B	MS35206-229 WAS AN525-632R6; NAS1149FN616P (Qty 14) WAS (Qty 9); MS21042L06 (Qty 7) WAS (Qty 9); ADD AN525-832R7, NAS1149FN882P & MS21042L08	RF	12.02.22
A	NEW ISSUE	RF	12.01.09
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2.0 Parts List

Qty -141	Qty -143	Qty -145	Part Number	Description
X			D350-567-141	FLOOR WINDOW CLOSE-OUT KIT (REGULAR SEATS)
	X		D350-567-143	FLOOR WINDOW CLOSE-OUT KIT (ENERGY ATTENUATING SEATS)
		X	D350-567-145	FLOOR WINDOW CLOSE-OUT KIT (AS 350 B3e)
1	1	1	D3802-1-024	SEAL (24")
1	1		D4434-041	FWD BRACKET ASSEMBLY
1	1		D4434-047	COVER ASSEMBLY
1			D4435-045	T/R BELLCRANK COVER ASSEMBLY
2	2	2	D4435-9	BRACKET
1	1	1	D4436-041	AFT BRACKET ASSEMBLY
1	1	1	D4441-1-240	RUBBER SEAL (24")
		1	D4730-020-030	VELCRO STRIP
	1	1	D4971-041	T/R BELLCRANK COVER ASSEMBLY
		1	D5076-041	FWD BRACKET ASSEMBLY
7	5	5	AN3-3A	BOLT
2	2	2	AN525-10R6	SCREW
2	2	2	AN525-832R7	SCREW
		1	CB 200	3.5g ACRYLIC ADHESIVE
7	7	7	MS21042L06	NUT (OR MS21042-06)
2	2	2	MS21042L08	NUT (OR MS21042-08)
5	5	5	MS21042L3	NUT (OR MS21042-3)
2	2	2	MS21059L3	NUTPLATE
7	7	7	MS35206-229	SCREW
12	10	10	NAS1149F0332P	WASHER (AN960-10L)
14	14	14	NAS1149FN616P	WASHER (OR AN960-6L)
2	2	2	NAS1149FN816P	WASHER (OR AN960-8L)

3.0 Weight and Balance

The following is the net weight increase associated with the D350-567-141/-143/-145 Kits.

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
D350-567-141/-143/-145	3.9 lb	17.9 in	69.8 in-lb	65.5 in	255.5 in-lb
Floor Window Close-out Kit	1.77 kg	0.45 m	0.80 m-kG	1.66 m	2.94 m-kG

4.0 Installation Procedure

Notes:

- Figure 2 shows the general arrangement and installation of the D350-567-141/-143/-145 Close-out Kits. The procedure that follows outlines the step-by-step procedures for installing the kit with reference photos from the initial installation.
- In conjunction with this modification, it is acceptable to remove the interior floor windows as applicable. Note that the structural reinforcement around the window opening is still required.
 - D350-567-115 - OK to remove D3295-041
 - D350-567-031 - OK to remove D3212-1
 - D350-567-011 - OK to remove D2214
 - D350-567-021 - OK to remove D2951
- It is acceptable to drill/trim the D350-567-141/-143/-145 Close-out Kits as required to improve fit.

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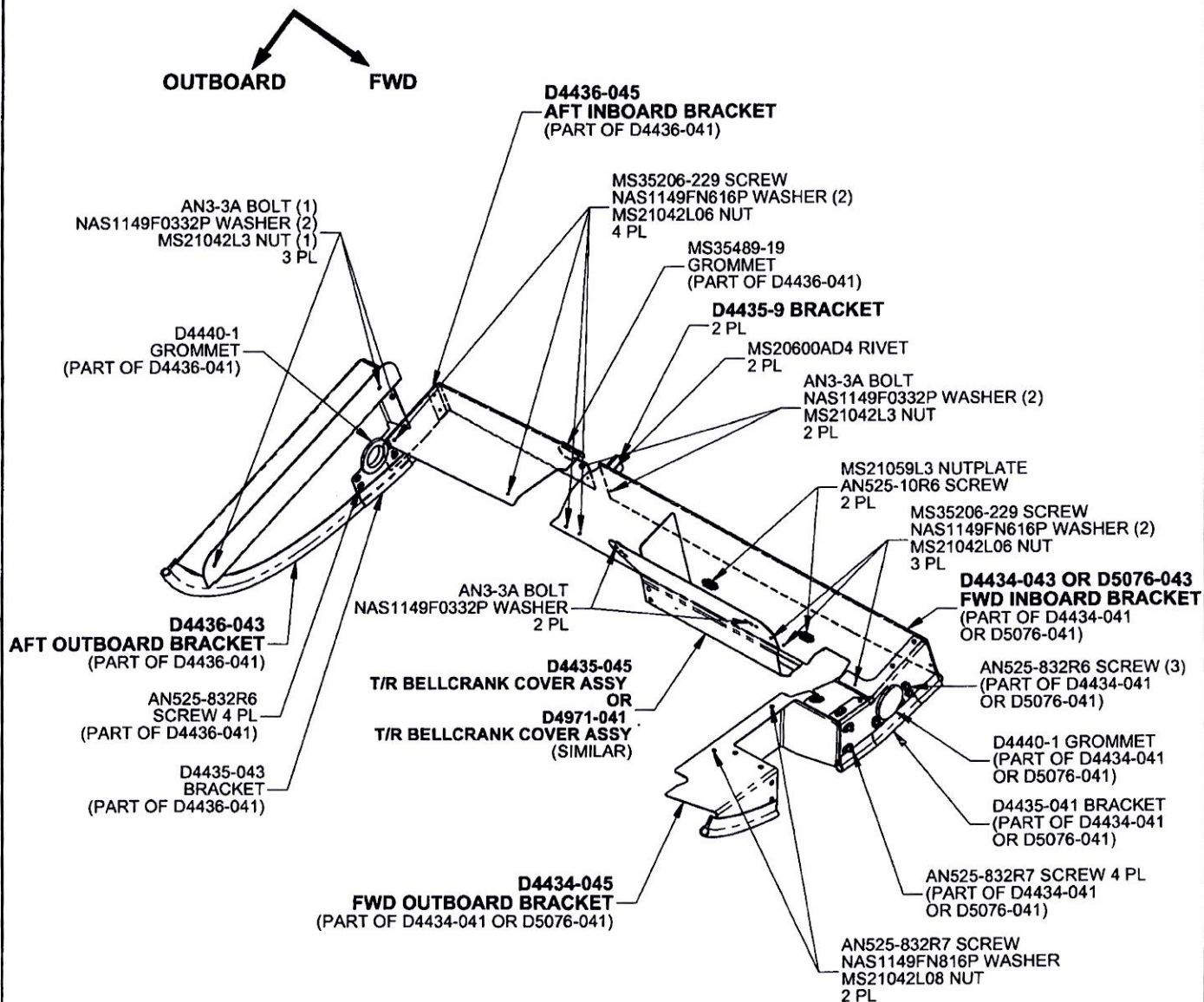


Figure 2. Floor Window Close-out Kit Installation

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4.1 Temporarily install D4436-043 Aft Outboard Bracket and D4436-045 Aft Inboard Bracket using clecos and/or cleco clamps. Before drilling holes:

- a) Position the D4436-043 Aft Outboard Bracket so the flange contacts the main beam as shown in Figure 3.
- b) Confirm that the D4436-043 Aft Outboard Bracket and beam angle are parallel as shown in Figure 4.

4.2 Temporarily install D4434-043/D5076-043 Fwd Inboard Bracket and D4434-045 Fwd Outboard Bracket using clecos and cleco clamps. Confirm there is no contact between D4436-045 Aft Inboard Bracket and D4434-043 /D5076-043 Fwd Inboard Bracket and main beam gusset as shown in Figure 5.

F 4.3 For -141 installations, if aircraft is equipped with Collective Circuit Breaker Board box, trim D4434-043 Fwd Inboard Bracket as shown in Figure 14. Note: Confirm the D4434-047 Bracket fits over the Collective Circuit Breaker Board box. Adjust opening as required.

4.4 For -143 installations, if aircraft is equipped with Collective Circuit Breaker Board box, trim D4434-043 Fwd Inboard Bracket as shown in Figure 14. Install D4971-041 T/R Bellcrank cover as shown in Figure 13b. Note: Confirm the D4434-047 Bracket fits over the Collective Circuit Breaker Board box. Adjust opening as required.

4.5 For -145 installations, if aircraft is equipped with Collective Circuit Breaker Board box, use D5076-043 Fwd Inboard Bracket as shown in Figure 13c. Install D4971-041 T/R Bellcrank cover as shown in Figure 13c. Note: Confirm the D5076-3 Cover fits over the Collective Circuit Breaker Board box. Adjust opening as required.

4.6 Drill out rivets holding plastic wire bundle stand offs. Transfer drill $\varnothing 0.144$ holes to D4436-045 Aft Inboard Bracket per Figure 6. Transfer drill 2 x $\varnothing 0.144$ holes to D4434-043/D5076-043 Fwd Inboard Bracket per Figure 7. Transfer drill 2 x $\varnothing 0.144$ holes for D4434-043/D5076-043 Fwd Inboard Bracket per Figure 8. Before drilling confirm the D4434-043/D5076-043 and D4436-045 brackets are flush with outboard edge of main beam flange. Assemble D4436-045 Aft Inboard Bracket and D4434-043/D5076-043 Fwd Inboard Bracket and wire bundle stand offs to main beam flange using MS35206-229 screw, NAS1149FN616P washer and MS21042L06 nut.

4.7 Install D4436-043 Aft Outboard Bracket using AN3-3A bolt and NAS1149F0332P washer and MS21042L3 nut per Figure 9.

4.8 Remove 2 rivets holding RH heating plastic stand off as shown in Figure 10. Position the D4435-9 Brackets on the in/outboard sides of the cross beam and transfer drill 2 x $\varnothing 0.129$ holes from crossbeam to both D4435-9 Brackets. Install D4435-9 Brackets and RH heating plastic stand off using MS20600AD4 rivets or equivalent.

4.9 Drill a pilot hole from D4435-9 Bracket to the D4434-043/D5076-043 Fwd Inboard Bracket and D4436-045 Aft Inboard Bracket and open to $\varnothing 0.191$. Install AN3-3A bolt, NAS1149F0332P washer and MS21042L3 nut as shown in Figure 10. Be sure to maintain edge distance.

4.10 Transfer drill 2 x $\varnothing 0.144$ holes from crossbeam to D4434-045 Fwd Outboard Bracket if holes exist in crossbeam. If holes do not exist, drill 2 x $\varnothing 0.144$ holes at either end of D4434-045 bracket as shown in Figure 11. Install AN525-832R7 screws, NAS1149FN816P washer and MS21042L08 nuts.

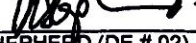
4.11 FOR D350-567-141 KIT

a) Align D4435-045 T/R Bellcrank Cover Assy with existing holes in RH seat track lower frame and temporarily install using clecos and/or cleco clamps as shown in Figure 12a.

b) Transfer drill 2 x $\varnothing 0.098$ holes from D4435-045 T/R Bellcrank Cover Assy to D4434-043 Fwd Inboard Bracket. Open holes to $\varnothing 0.191$ and install MS21059L3 nut plate into D4434-043 Fwd Inboard Bracket as shown in Figure 12a and Figure 13a. Install D4435-045 T/R Bellcrank Cover Assy using AN525-10R6 screw, AN3-3A bolt and NAS1149F0332P washer per Figure 12a and Figure 13a.

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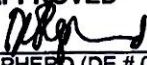
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4.12 FOR D350-567-143/-145 KIT

- a) Remove the D4972-041 Side Plate Assy from the D4971-041 T/R Bellcrank Cover Assy and retain fasteners.
 - b) Align D4971-1 T/R Bellcrank Cover with existing holes in RH seat track lower frame and temporarily install using clecos and/or cleco clamps as shown in Figure 12b.
 - c) Bond D4730-020-030 Velcro to back of D4971-1 T/R Bellcrank Cover as shown in Figure 12b using CB 200 adhesive.
 - d) Transfer drill 2 x $\varnothing 0.098$ holes from D4971-1 Cover Plate to D4434-043/D5076-043 Fwd Inboard Bracket. Open holes to $\varnothing 0.191$ and install MS21059L3 nut plate into D4434-043/D5076-043 Fwd Inboard Bracket as shown in Figure 13b/13c. Install D4971-1 Cover Plate using AN525-10R6 screws and D4730-020-030 Velcro per Figure 12b and Figure 13b/13c.
 - e) Re-install the D4972-041 Side Plate Assy using the retained fasteners.
- 4.13 The D4440-1 grommets are provided to facilitate the routing of wiring harness thru the close-out kit as required. The wiring harness should be secure to the aircraft structure per AC 43.13.13-1B or AS350 Chapter 20.02.01.
- 4.14 Use the D3802-1-024 Seal to fill gaps between the brackets and the cowlings that are larger than 0.25 inch.
- 4.15 Perform travel/interference check of the flight controls to ensure there is no interference and all controls still have full travel.
- 4.16 Ensure there is a gap between the components of the D350-567-141/-143/-145 Close-out Kit and the aircraft structure so that the Close-out Kit does not chafe, interfere, or cause damage to the surrounding aircraft structure. In areas where the D350-567-141 /-143/-145 Close-out Kit may contact the aircraft structure, protect from abrasion using chafing tape or a layer Proseal 890 or MIL-S-8802 class B2 sealant or equivalent as required.

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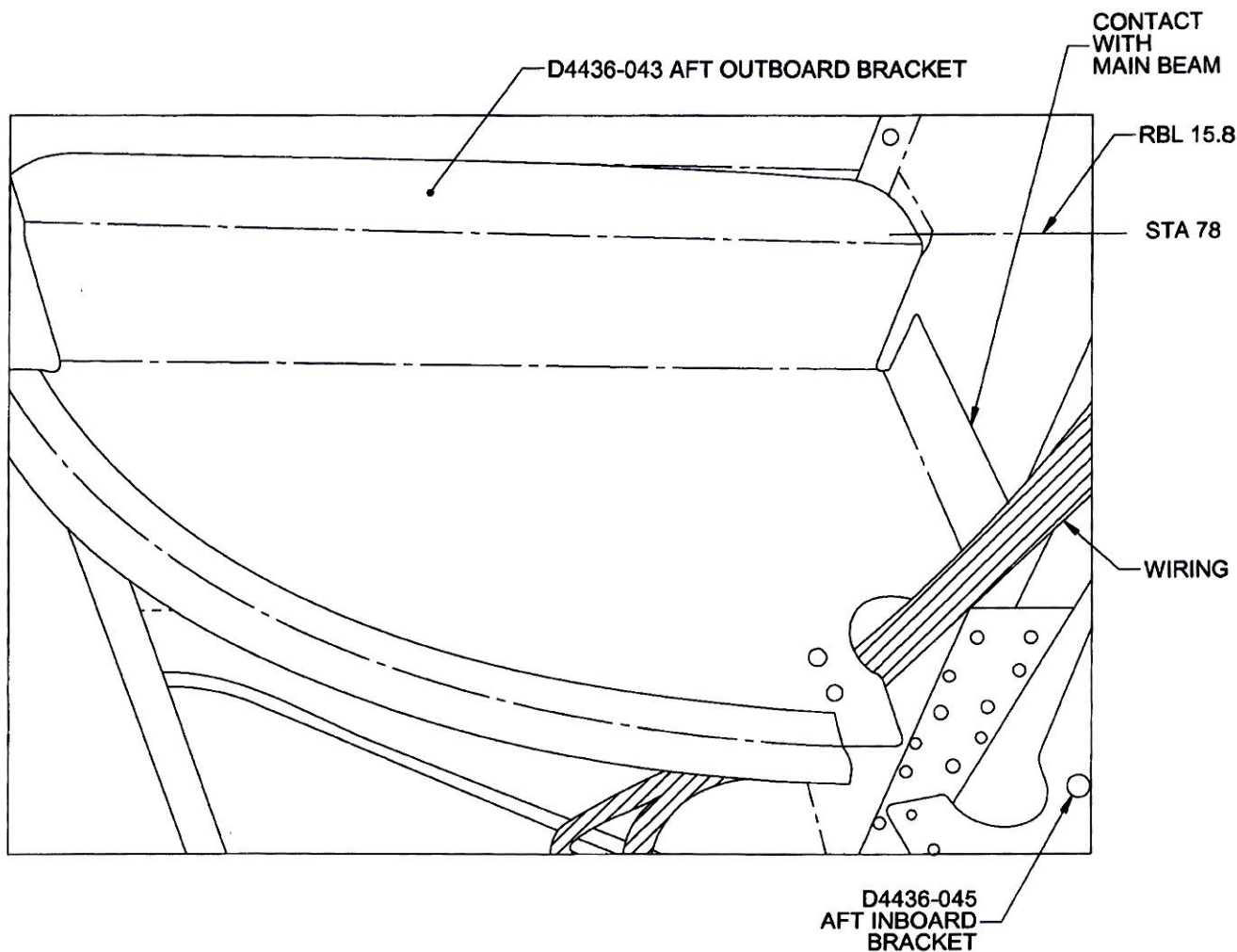


Figure 3. D4436-043 Aft Outboard Bracket Installation

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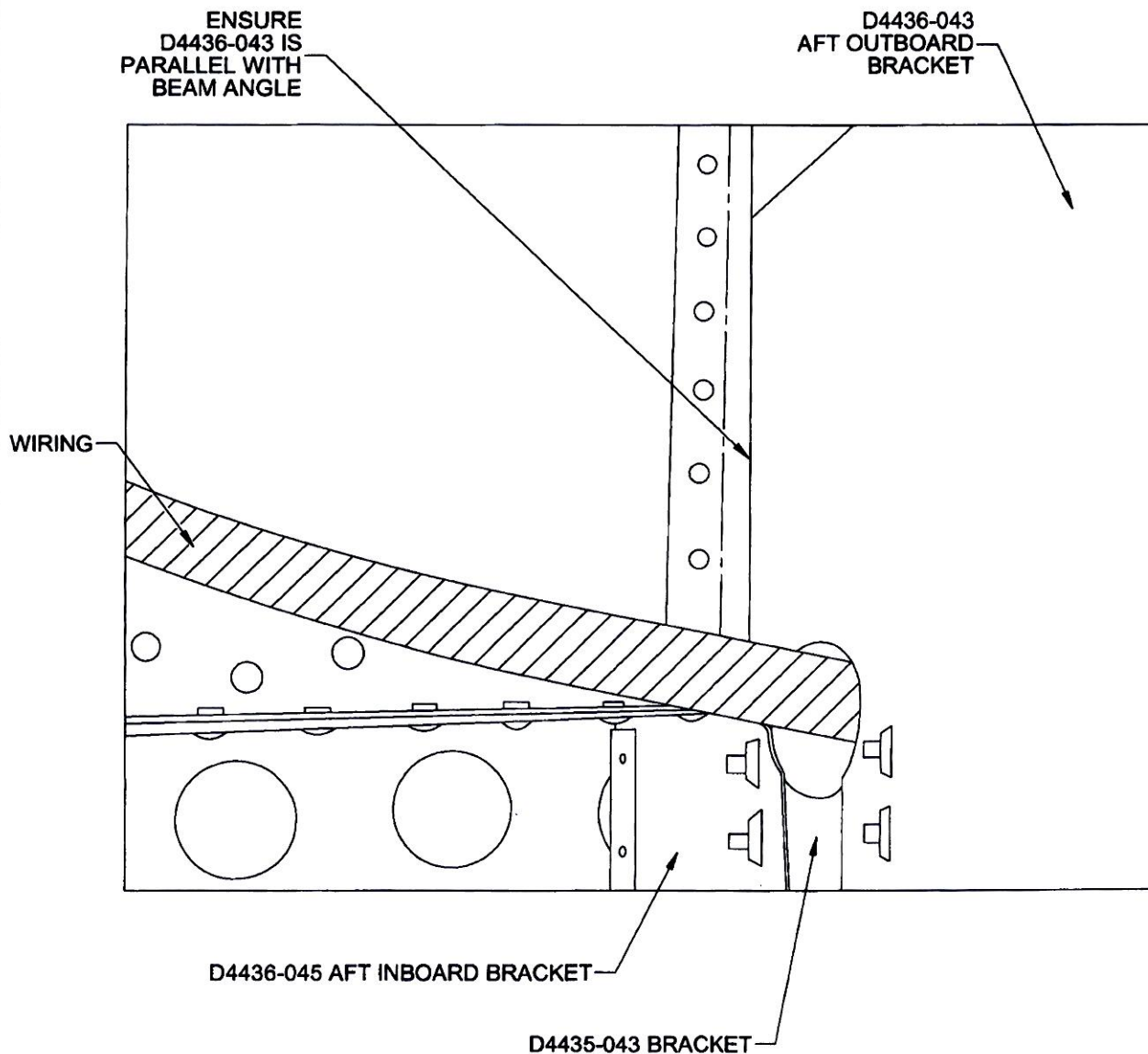


Figure 4. D4436-043 & D4435-043 Brackets Installation

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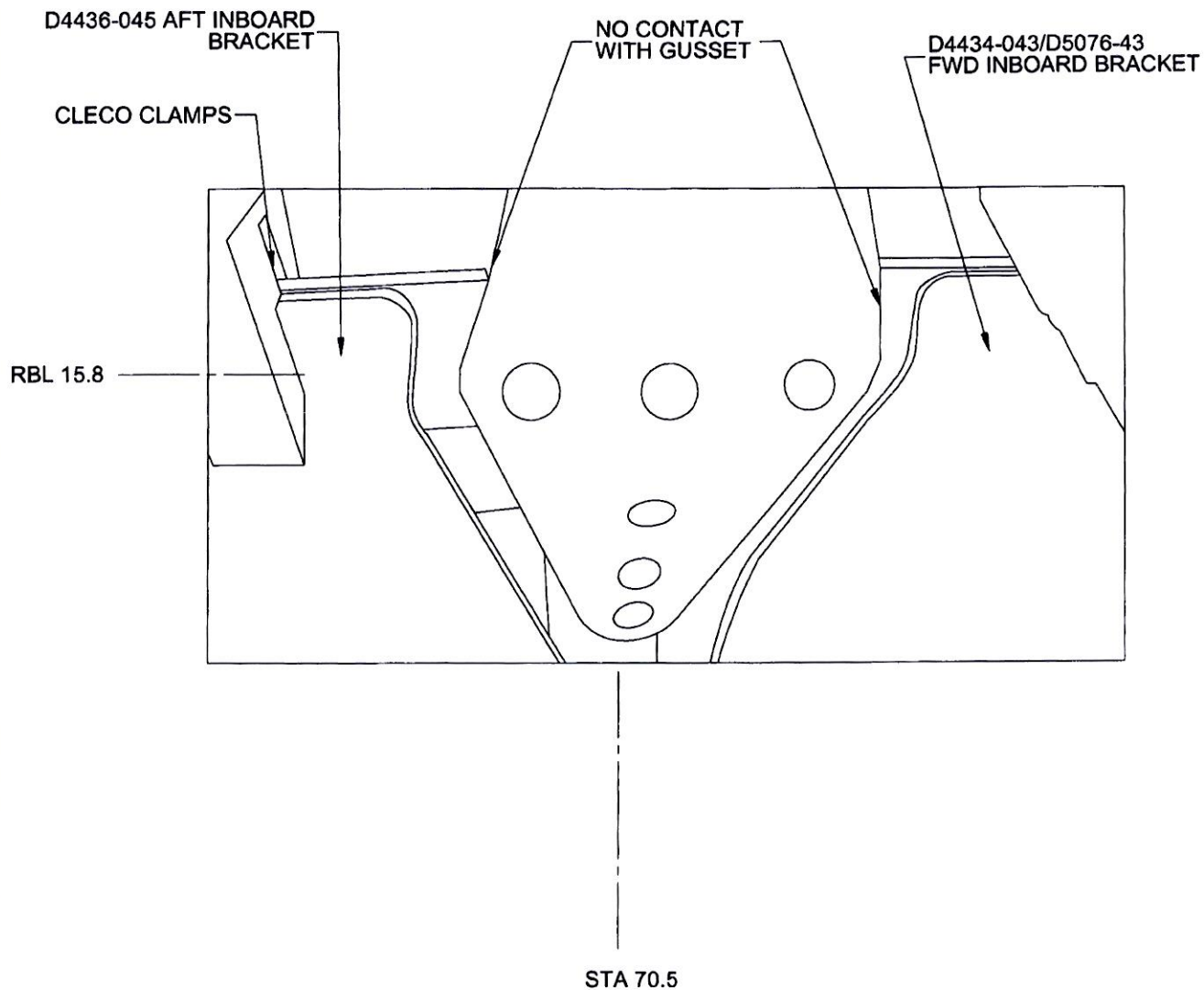


Figure 5. D4436-045 & D4434-043/D5076-043 Brackets Installation

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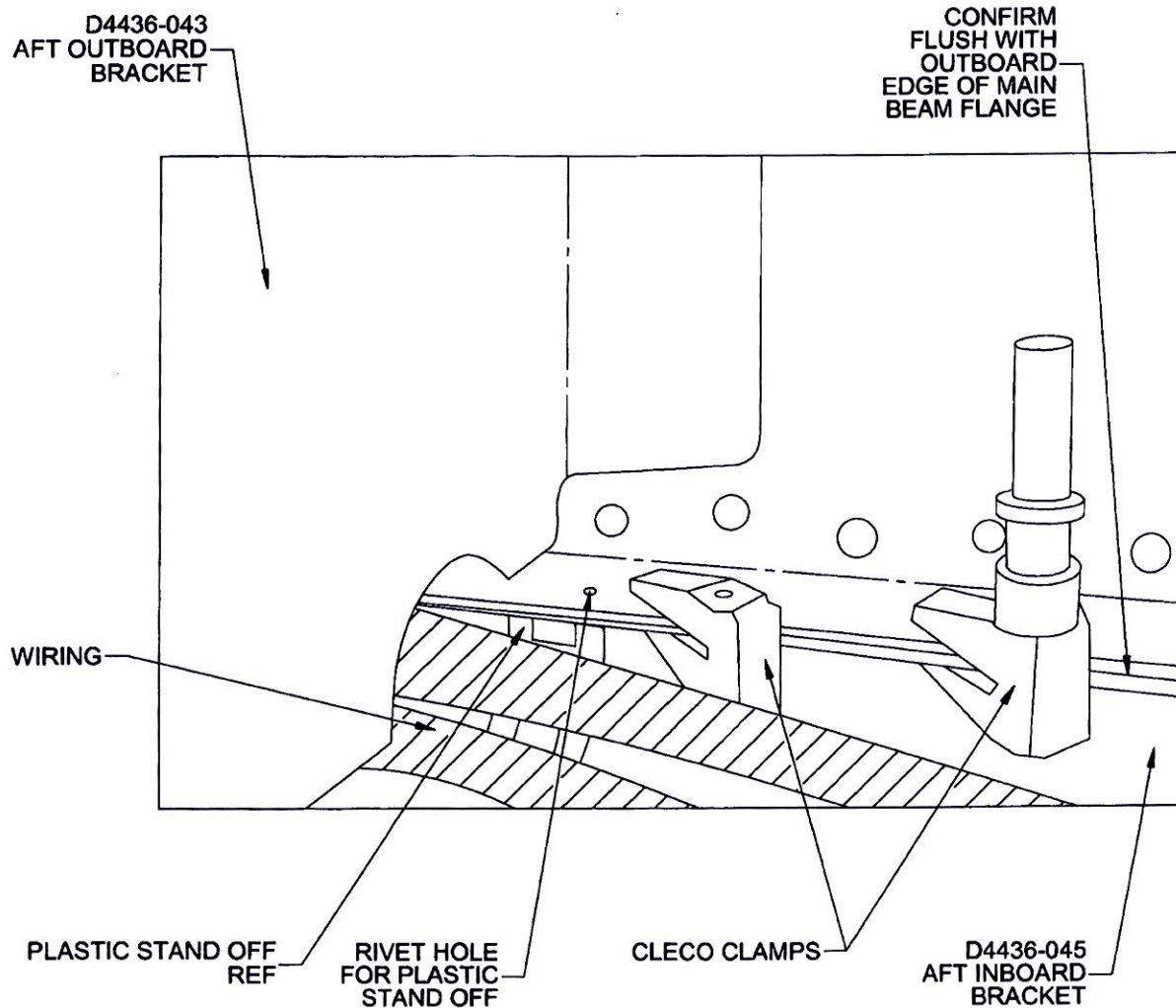


Figure 6. D4436-043 & D4436-045 Brackets Installation

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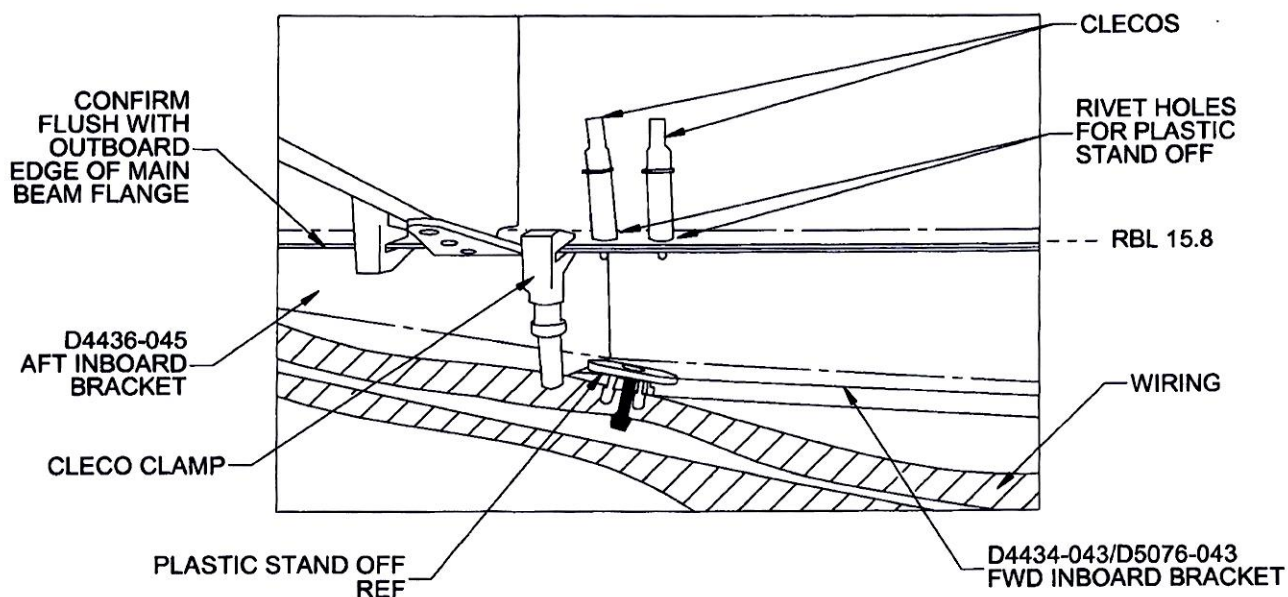


Figure 7. D4434-043/D5076-043 & D4436-045 Brackets Installation

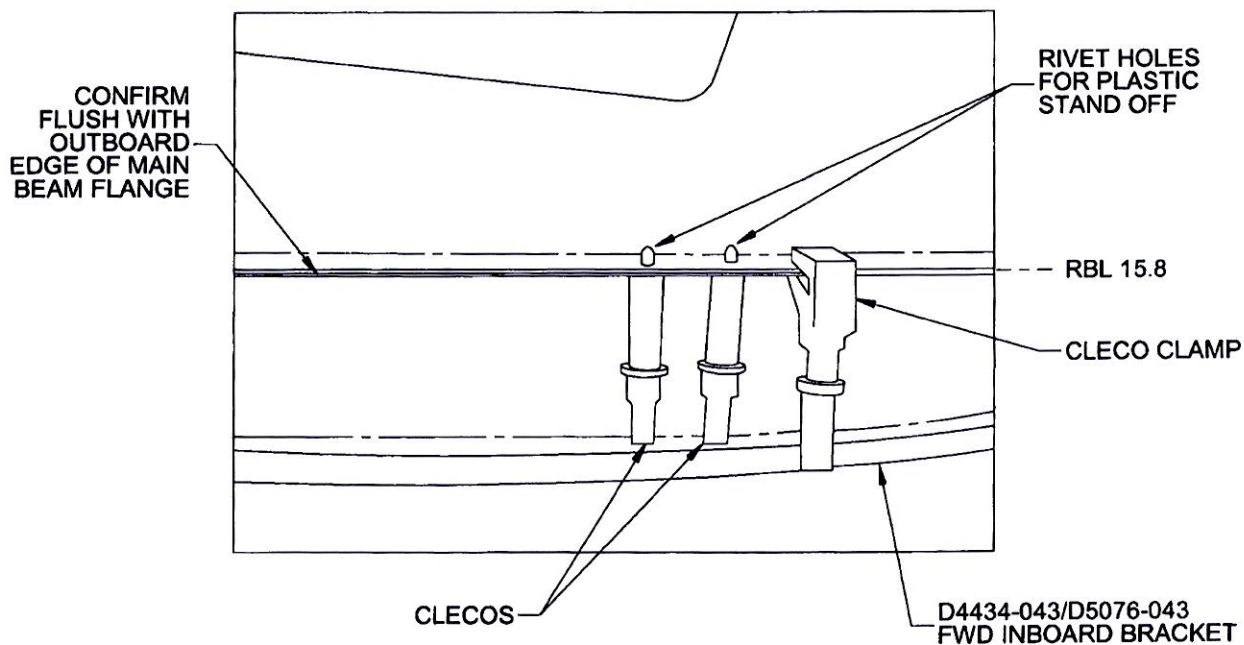


Figure 8. D4434-043/D5076-043 Fwd Inboard Bracket Installation

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INSTALL
D4436-043
AFT OUTBOARD BRACKET
USING
AN3-3A BOLT (1)
NAS1149F0332P WASHER (2)
MS21042L3 NUT (1)
3 PL

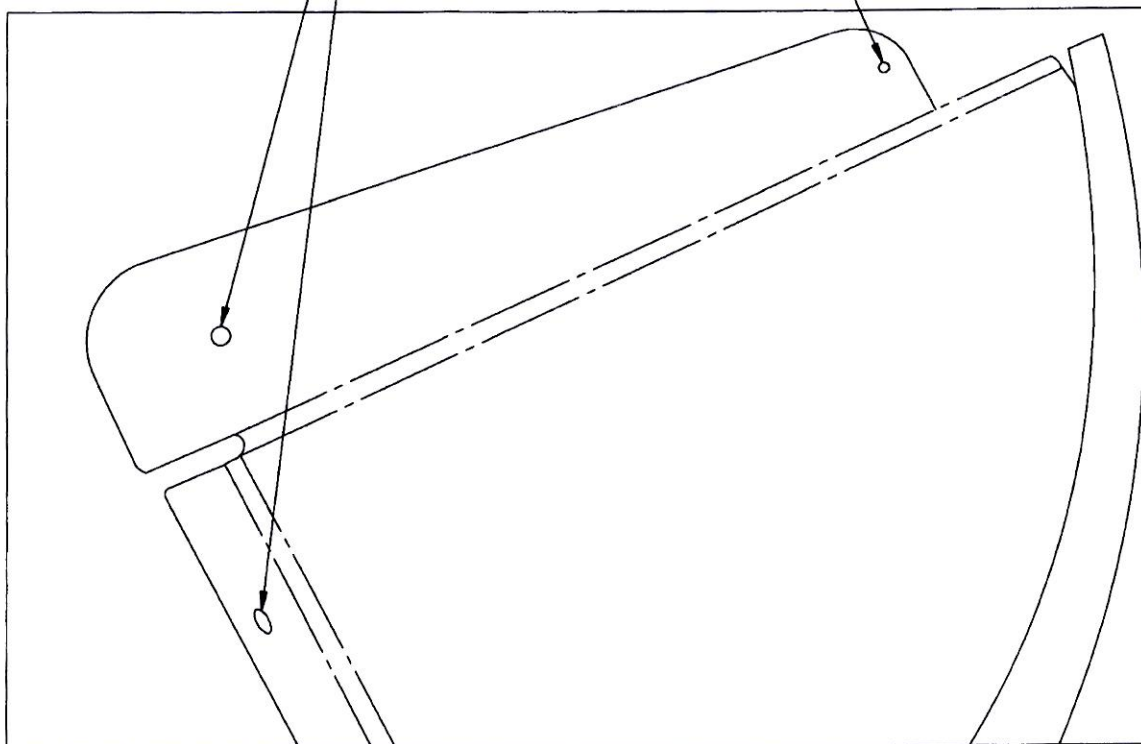


Figure 9. D4436-043 Aft Outboard Bracket Installation

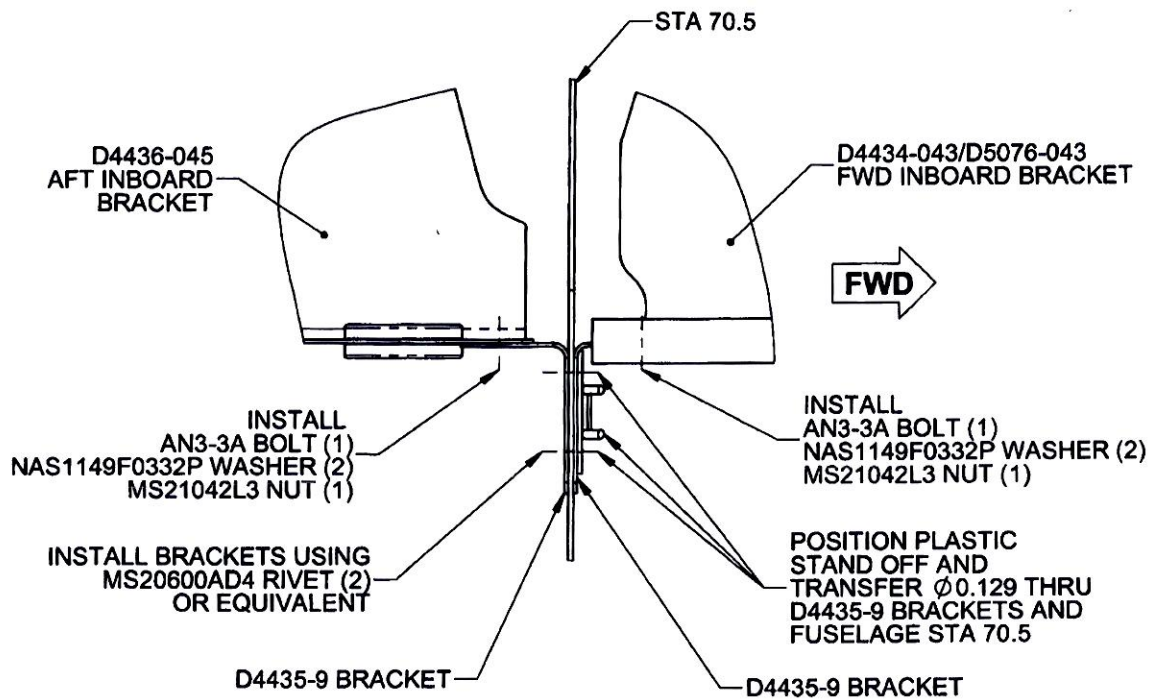
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LOOKING UP AT STA 70.5

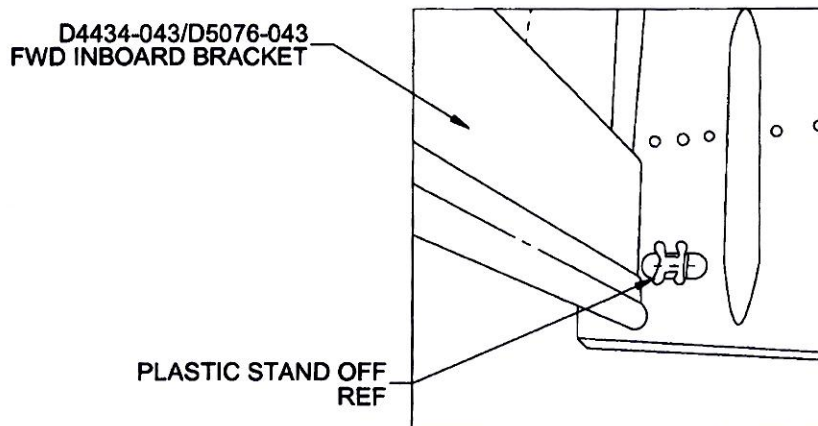


Figure 10. D4434-043/D5076-043 and D4435-9 Brackets Installation

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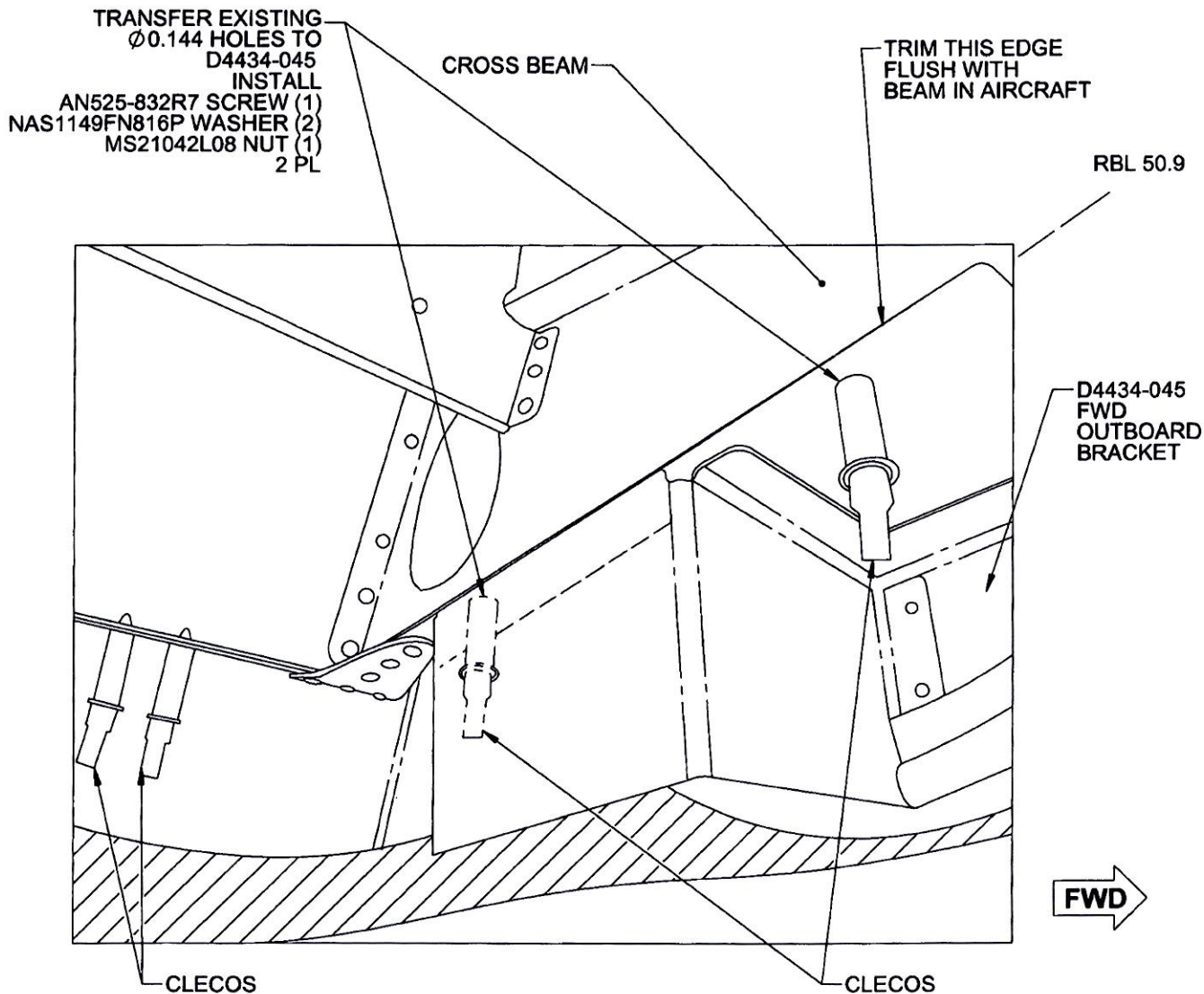


Figure 11. D4434-045 Bracket Installation

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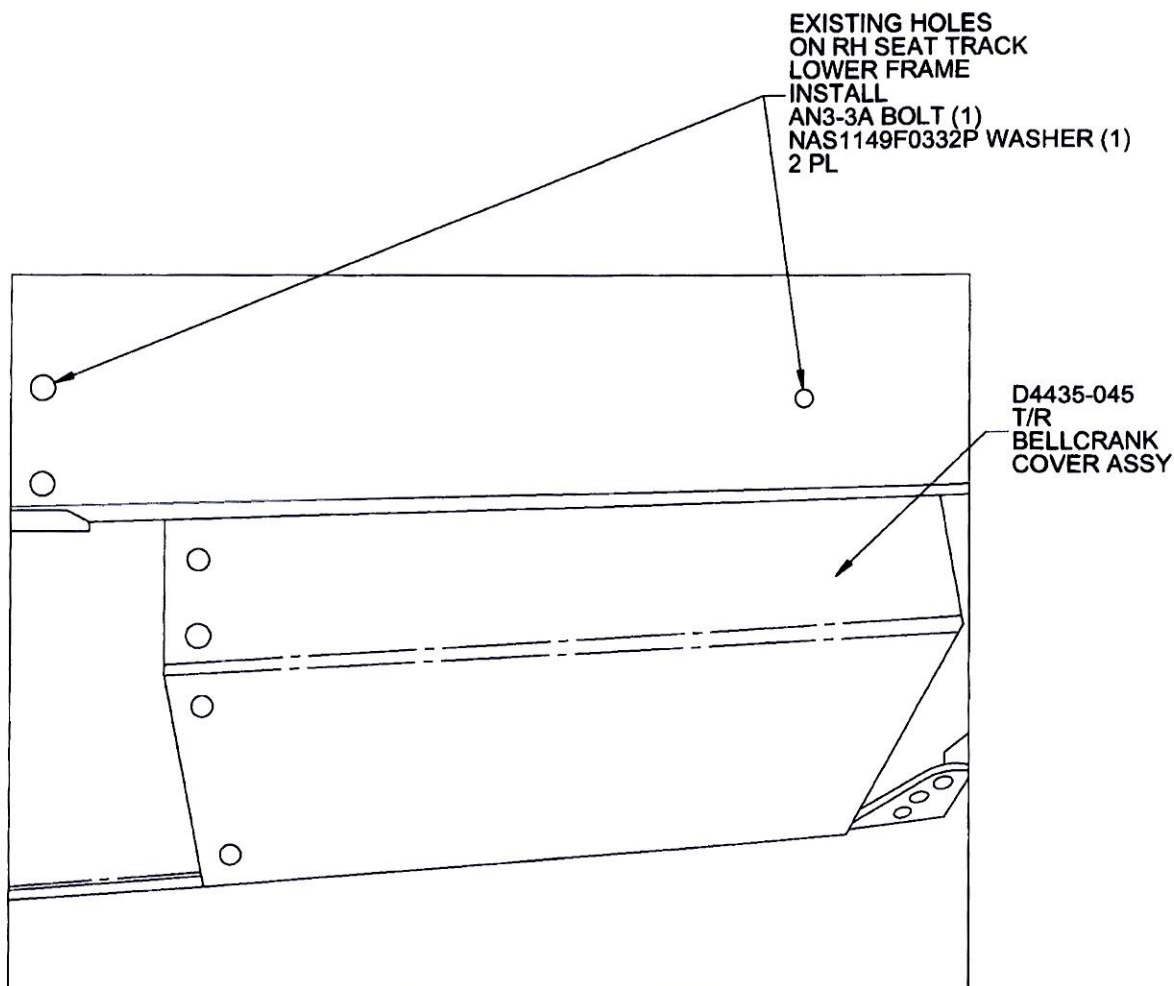


Figure 12a. D4435-045 T/R Bellcrank Cover Installation (-141)

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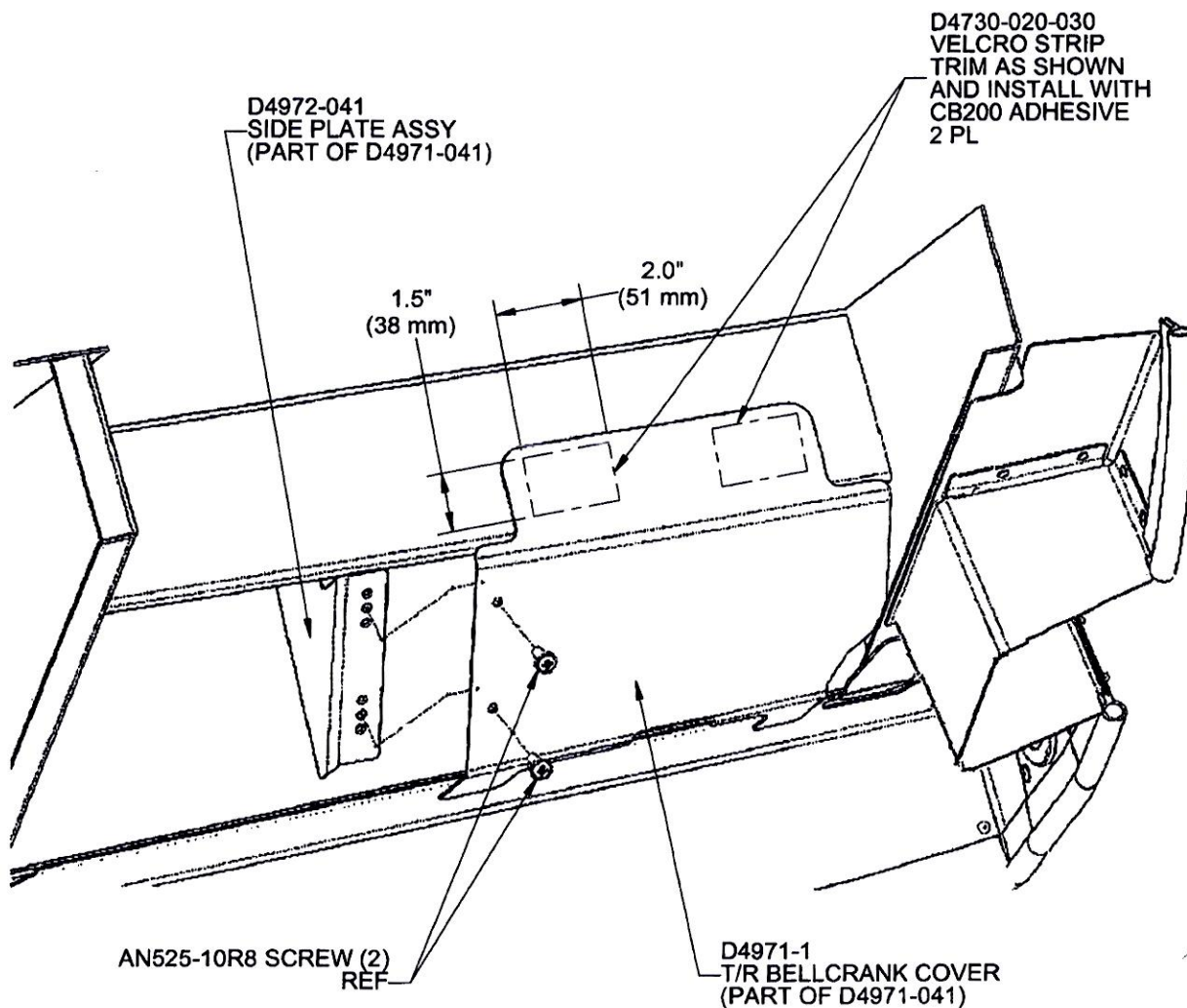


Figure 12b. D4971-041 T/R Bellcrank Cover Assy Installation (-143/-145)

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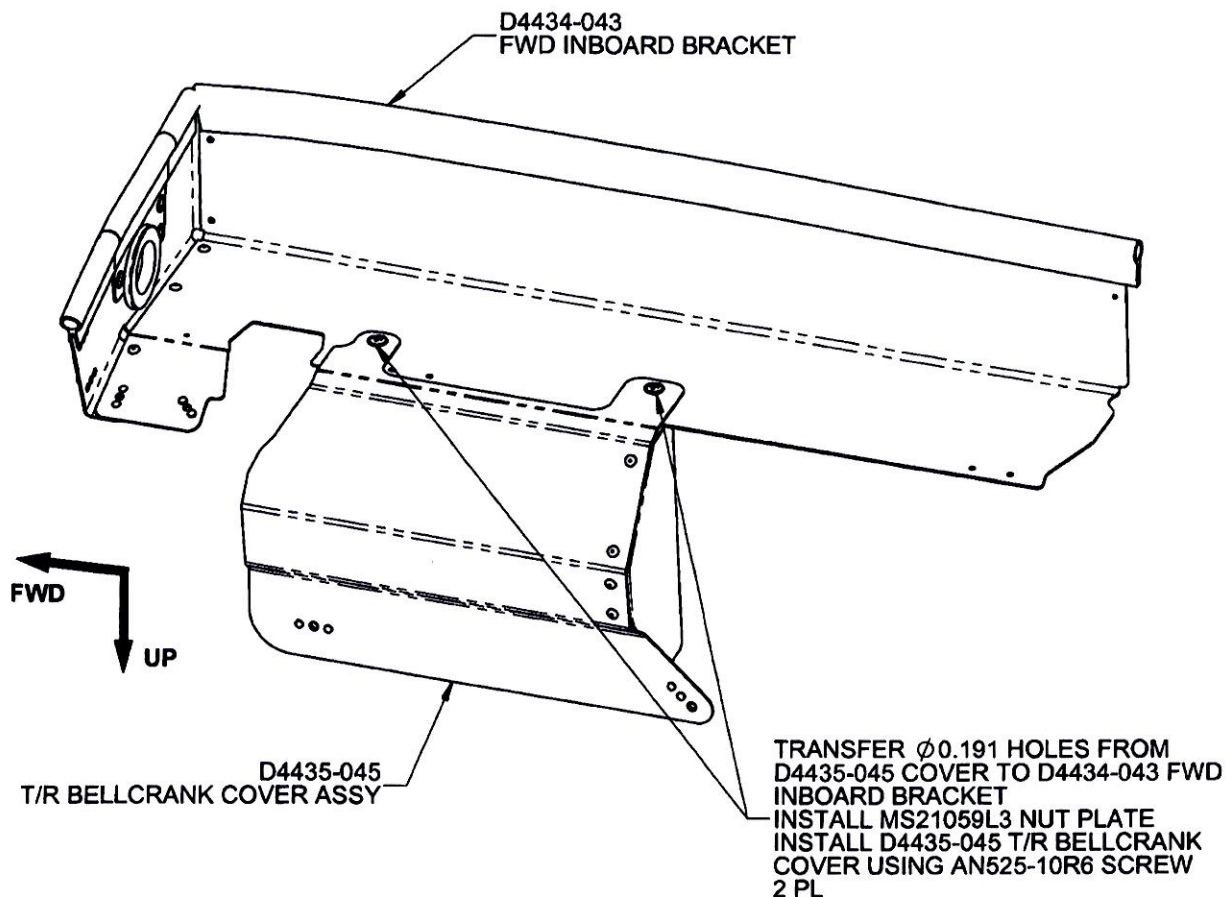


Figure 13a. D4435-045 Cover Installation (-141 ONLY)

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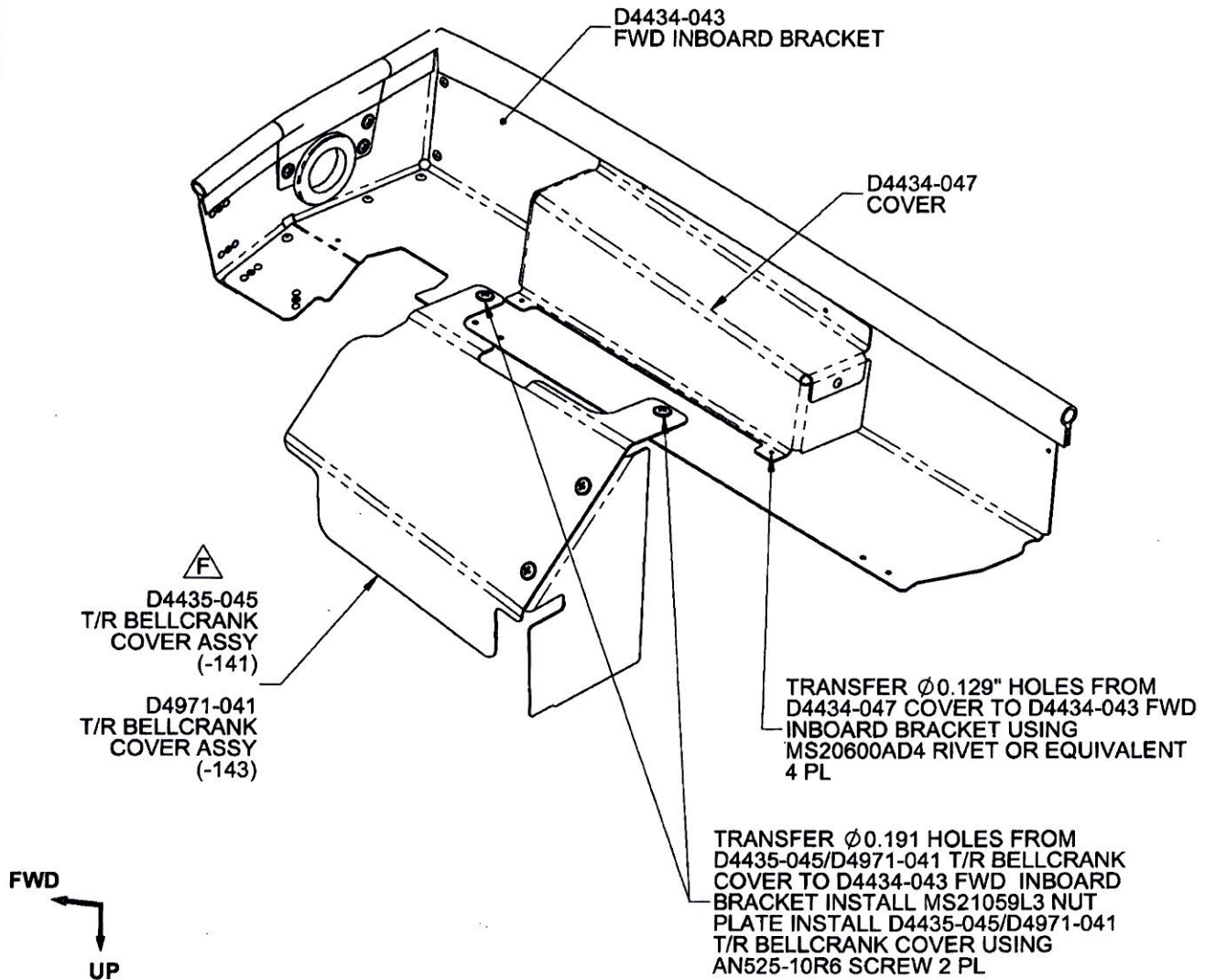


Figure 13b. D4971-041/D4435-045 & D4434-047 Cover Installation △
(D4434-047 is Optional on -141)

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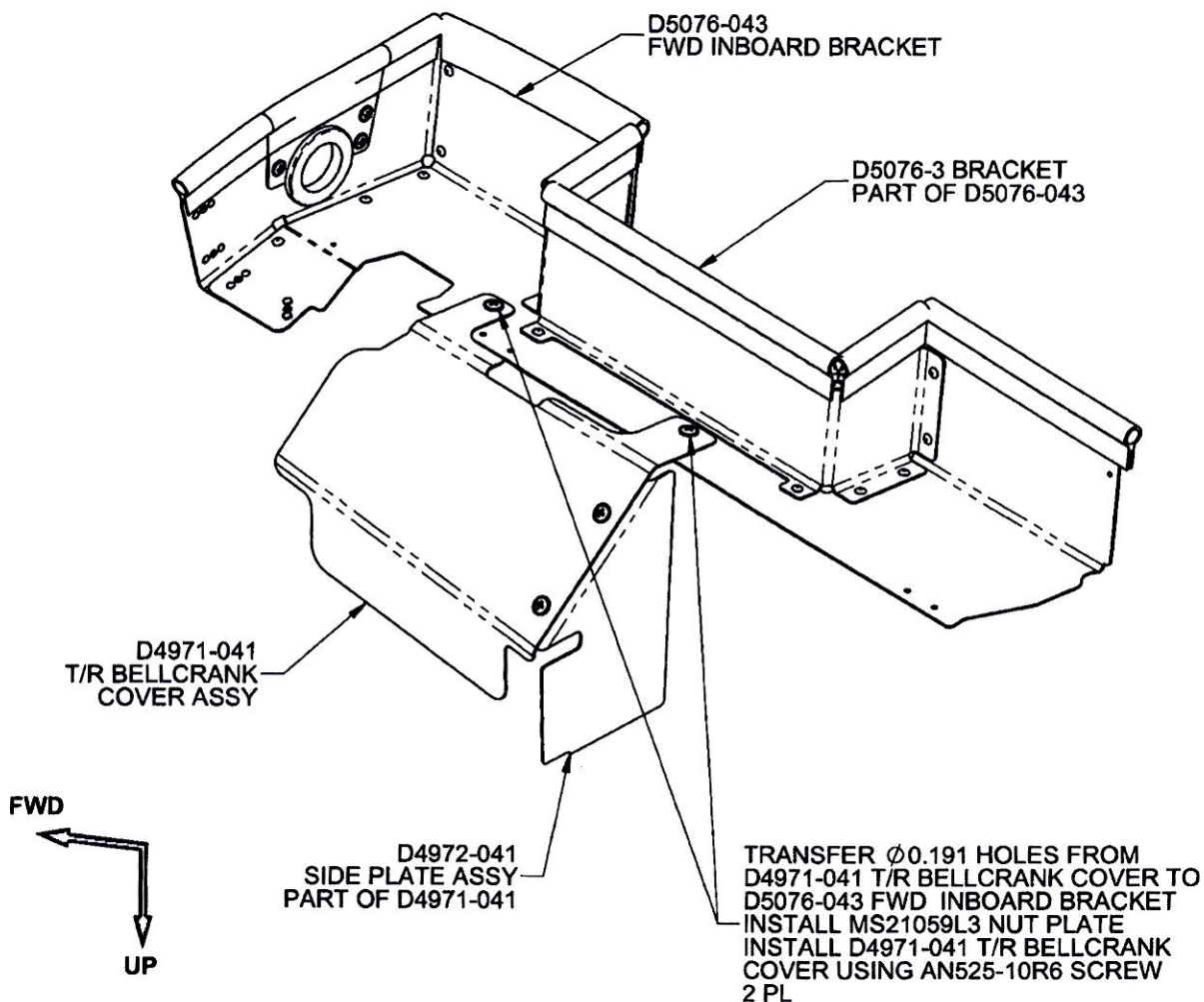


Figure 13c. D4971-041 INSTALLATION INTO D5076-043 (-145 ONLY)

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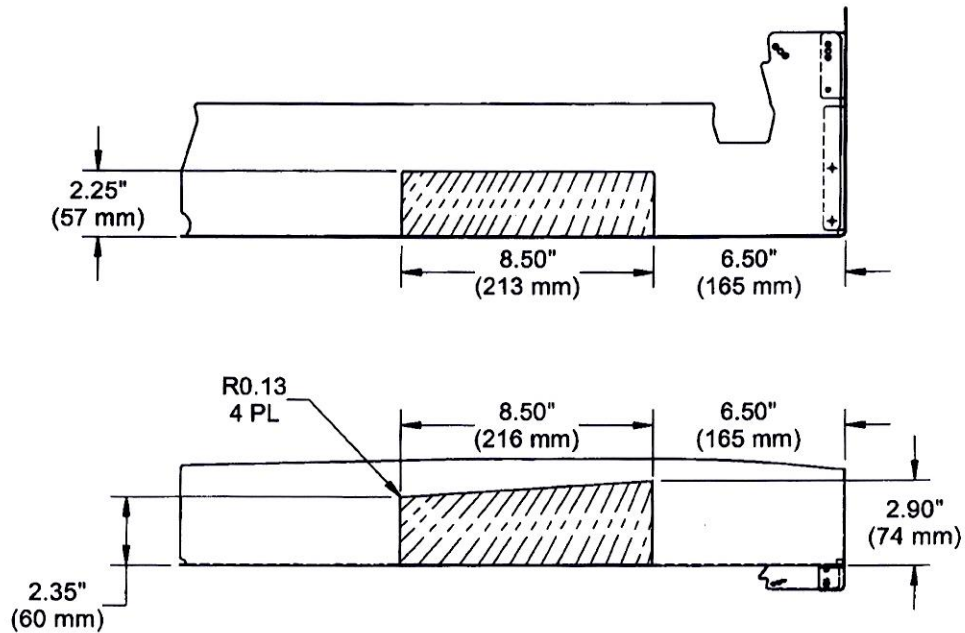
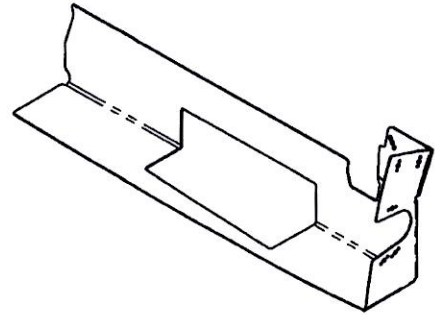


Figure 14. D4434-043 Fwd Inboard Bracket Cutout

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Work Order ID 148887

Wednesday, November 23, 2016 10:27:44 A

148887

Page 1

Item ID: D350-567-141**Accept*****N900040100*****Setup Start*****NS1*****Revision ID:****Stop*****NS2*****Item Name:** Floor Window Close Out**Start Date:** 6/30/2016 **Start Qty:** 1.00***1*****Cust Item ID:****Required Date:** 7/13/2016 **Req'd Qty:** 1.00***1*****Customer:****Reference:****Approvals:** **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____**Run Start*****NR1*****QC:** _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____**Stop*****NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
DSI 9590	F

DAS
21
9-89

NOV 23 2016

100

Document Control

0.00

100

DOCUMENT CONTROL

DC

Memo

0.00

Doc.Control -USB or Paperwork

Photocopy bluefile & type labels per PPP D350-567-141 CHG004

110

Pick Kit

0.00

110

Packaging

Memo

0.00

Packaging

120

QC4- 100% Inspect kits for completeness

0.00

120

QC

Memo

0.00

Quality Control

REFERENCE ONLY

2.0 Parts List

Qty -141	Qty -143	Qty -145	Part Number	Description
X			D350-567-141	FLOOR WINDOW CLOSE-OUT KIT (REGULAR SEATS)
	X		D350-567-143	FLOOR WINDOW CLOSE-OUT KIT (ENERGY ATTENUATING SEATS)
		X	D350-567-145	FLOOR WINDOW CLOSE-OUT KIT (AS 350 B3e)
1	1	1	D3802-1-024	SEAL (24")
1	1		D4434-041	FWD BRACKET ASSEMBLY
1	1		D4434-047	COVER ASSEMBLY
1			D4435-045	T/R BELLCRANK COVER ASSEMBLY
2	2	2	D4435-9	BRACKET
1	1	1	D4436-041	AFT BRACKET ASSEMBLY
1	1	1	D4441-1-240	RUBBER SEAL (24")
		1	D4730-020-030	VELCRO STRIP
	1	1	D4971-041	T/R BELLCRANK COVER ASSEMBLY
		1	D5076-041	FWD BRACKET ASSEMBLY
7	5	5	AN3-3A	BOLT
2	2	2	AN525-10R6	SCREW
2	2	2	AN525-832R7	SCREW
		1	CB 200	3.5g ACRYLIC ADHESIVE
7	7	7	MS21042L06	NUT (OR MS21042-06)
2	2	2	MS21042L08	NUT (OR MS21042-08)
5	5	5	MS21042L3	NUT (OR MS21042-3)
2	2	2	MS21059L3	NUTPLATE
7	7	7	MS35206-229	SCREW
12	10	10	NAS1149F0332P	WASHER (AN960-10L)
14	14	14	NAS1149FN616P	WASHER (OR AN960-6L)
2	2	2	NAS1149FN816P	WASHER (OR AN960-8L)

3.0 Weight and Balance

The following is the net weight increase associated with the D350-567-141/-143/-145 Kits.

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
D350-567-141/-143/-145 Floor Window Close-out Kit	3.9 lb 1.77 kg	17.9 in 0.45 m	69.8 in-lb 0.80 m-kg	65.5 in 1.66 m	255.5 in-lb 2.94 m-kg

4.0 Installation Procedure

Notes:

- Figure 2 shows the general arrangement and installation of the D350-567-141/-143/-145 Close-out Kits. The procedure that follows outlines the step-by-step procedures for installing the kit with reference photos from the initial installation.
- In conjunction with this modification, it is acceptable to remove the interior floor windows as applicable. Note that the structural reinforcement around the window opening is still required.
 - D350-567-115 - OK to remove D3295-041
 - D350-567-031 - OK to remove D3212-1
 - D350-567-011 - OK to remove D2214
 - D350-567-021 - OK to remove D2951
- It is acceptable to drill/trim the D350-567-141/-143/-145 Close-out Kits as required to improve fit.

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BRANCH
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